(19) 世界知识产权组织 国际 局

(43) 国际公布日: 2005年3月24日(24.03.2005)

PCT

(10) 国际公布号: WO 2005/026504 A1

(51) 国际分类号7:

F01M 9/06

(21) 国际申请号:

PCT/CN2004/000998

(22) 国际申请日:

2004年8月27日(27.08.2004)

(25) 申请语言:

中文

(26) 公布语言:

中文

(30) 优先权:

03210165.1

2003年8月29日(29.08.2003) CN

- (71)(72) 发明人/申请人: 胡济荣(HU, Ji-Rong) [CN/CN]; 中国浙江省永康市古山工业区星月集团总师办, Zhejiang 321307 (CN).
- (74) 代理人: 广东国欣律师事务所(GUANGDONG GUOXIN LAW FIRM) 中国广东省深圳市红岭中路 1010号国际信托大厦一楼, Guangdong 518008 (CN)。
- (81) 指定国(除另有指明,要求每一种可提供的国家保护): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,

PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

(84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO(BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

根据细则4.17的声明:

- 关于发明人身份(细则4.17(i))对所有指定国 关于申请人在国际申请日有权申请并被授予专利(细则 4.17(ii))对所有指定国
- 发明人资格(细则4.17(iv))仅对美国

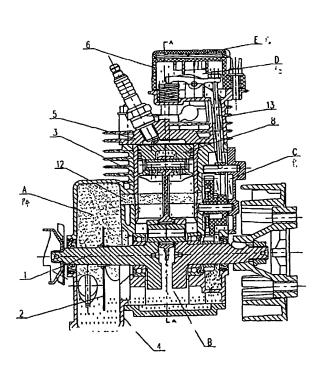
本国际公布:

- 包括国际检索报告。
- 在修改权利要求的期限届满之前进行,在收到该修改后 将重新公布。

所引用双字母代码和其它缩写符号,请参考刊登在每期 PCT公报期刊起始的"代码及缩写符号简要说明"。

(54) Title: A SMALL FOUR-STROKE GASOLINE ENGINE WITH OIL MIST LUBRICATION

(54) 发明名称: 油雾润滑的小型四冲程通用汽油机



(57) Abstract: The invention discloses a small four-stroke gasoline engine with oil mist lubrication. The lubrication oil way of the engine includes a crankshaft chamber (B), a camshaft chamber (C), an upper rocker arm chamber (D), and a condensation chamber (E). The camshaft chamber (C) communicates with the upper rocker arm chamber (D) via a tappet cavity. The upper rocker arm chamber (D) communicates with the condensation chamber (E). An oil mist chamber (A) is surrounded by an upper case body (3) and a lower case body (4) at the side of the crankshaft chamber (B), the bottom of the oil mist chamber (A) communicates with the crankshaft chamber (B). An agitation impeller is fixed on a crankshaft, which extends into the oil mist chamber (A). An oil way (12) is provided on the upper case body (3) between the oil mist chamber (A) and the camshaft chamber (C). An oil return way (15) is provided on a cylinder head assembly (5) An oil return way (14) is provided on the upper case body (3). An upper opening of the oil return way (15) communicates with the upper rocker arm chamber (D), a lower opening of the oil return way (15) communicates with the oil return way (14), and a lower opening of the oil return way (14) communicates with the crankshaft chamber (B) The conventional lubricating mode is changed by the structure of the invention, which makes use of the pressure change during the reciprocating movement of a piston assembly (8) to attain the circulation of oil. The structure is simple, reliable in operation and has small consumption in power.

BEST AVAILABLE COPY

WO 2005/026504 AJ

[见续页]